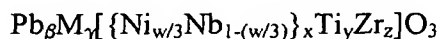


WHAT IS CLAIMED IS:

1. A piezoelectric ceramic composition comprising Pb, Ni, Nb, Ti, Zr and O, the composition being expressed by the formula



wherein M is at least one element selected from the group consisting of Sr, Ca and Ba,

5 γ is 0 to about 0.1, γ and β satisfy the relationships: $\gamma \leq 0.10$ and $0.950 \leq \beta + \gamma \leq 0.995$,
 x , y , and z lie on the lines connecting points A, B, C and D in a ternary diagram or
within the region surrounded by the lines, w satisfies the relationship $0.85 \leq w < 1.00$,
and α is $\beta + \gamma$ and is lower than the stoichiometric ratio, and wherein points A, B, C,
and D are:

10 A: $(x, y, z) = (0.10, 0.42, 0.48)$;
B: $(x, y, z) = (0.10, 0.48, 0.42)$;
C: $(x, y, z) = (0.40, 0.39, 0.21)$; and
D: $(x, y, z) = (0.40, 0.33, 0.27)$.

2. A piezoelectric ceramic composition according to Claim 1, wherein γ is 0.

3. A piezoelectric ceramic composition according to Claim 2, wherein $0.85 \leq w \leq 0.99$.

4. A piezoelectric ceramic composition according to Claim 3, wherein α satisfies the relationship $0.985 \leq \alpha$.

5. A piezoelectric ceramic composition according to Claim 3, wherein α satisfies the relationship $0.950 \leq \alpha$.

6. A piezoelectric ceramic composition according to Claim 2, wherein α satisfies the relationship $0.950 \leq \alpha \leq 0.995$.

7. A piezoelectric ceramic composition according to Claim 2, wherein $0.1 \leq x \leq 0.2$.

8. A piezoelectric ceramic composition according to Claim 1, wherein γ is greater than 0 and a part of the Pb is thereby replaced with at least one element selected from the group consisting of Sr, Ca and Ba.

9. A piezoelectric ceramic composition according to Claim 8, wherein $0.85 \leq w \leq 0.99$.

10. A piezoelectric ceramic composition according to Claim 9, wherein α satisfies the relationship $0.985 \leq \alpha$.

11. A piezoelectric ceramic composition according to Claim 9, wherein α satisfies the relationship $0.950 \leq \alpha$.

12. A piezoelectric ceramic composition according to Claim 8, wherein α satisfies the relationship $0.950 \leq \alpha \leq 0.995$.

13. A piezoelectric ceramic composition according to Claim 8, wherein $0.1 \leq x \leq 0.2$.

14. A piezoelectric element comprising a ceramic base element comprising a piezoelectric ceramic composition as set forth in Claim 8 and an internal electrode disposed in the ceramic base element.

15. A piezoelectric element according to Claim 14, wherein the internal electrode comprises Ag.

16. A piezoelectric element comprising a ceramic base element comprising a piezoelectric ceramic composition as set forth in Claim 2 and an internal electrode disposed in the ceramic base element.

17. A piezoelectric element according to Claim 16, wherein the internal electrode comprises Ag.

18. A piezoelectric element comprising a ceramic base element comprising a piezoelectric ceramic composition as set forth in Claim 1 and an internal electrode disposed in the ceramic base element.

19. A piezoelectric element according to Claim 18, wherein the internal electrode comprises Ag.